

Homework 15

Factorising and changing the subject of the formula

1. Factorise:

a. $y^2 + 5y$

b. $6ax + 9$

c. $x^2 + 6x + 9$

d. $w^2 - 64$

e. $k^2 + 5k - 6$

f. $x^2 - 10x - 24$

2. Factorise:

a. $4x^2 - 49$

b. $2c^2 + 5c + 2$

c. $12a^2 + 7a - 12$

d. $5x^2 - 8x - 4$

e. $4k^2 + 20k + 25$

f. $7w^2 - 2w - 9$

3. Fully factorise:

a. $5s^2 - 20$

b. $3m^2 - 6m - 9$

c. $12x^2 + 16x + 4$

4. The formula for changing from $^{\circ}\text{C}$ to $^{\circ}\text{F}$ is $C = \frac{5}{9}F - 32$.

Change the subject of the formula to F .

5. $H = w + \frac{50}{m^2}$. Change the subject of the formula to m .

6. Change the subject of the formula to x : $A = 5 + 4\sqrt{x}$